

Q² whether the incoming data packet includes a layer 3 IP datagram. The frame identifier 42 is configured for identifying the beginning of the IP frame, and locating the layer 3 address entries as the IP frame is received from the network. In particular, the frame identifier identifies the start position of the IP source address, IP destination address, TCP/UDP source port, and TCP/UDP destination port as the data is being received. The network switch port 20 also includes a flow module 44 configured for generating a packet signature using at least two (preferably all four) layer 3 address entries as their start position is identified by the frame identifier 42. In particular, the flow module 44 monitors the incoming data stream, and obtains the IP source address, IP destination address, TCP/UDP source port, and TCP/UDP destination port in response to start position signals output by the frame identifier 42.

Page 9, line 7, replace the paragraph starting at line 7 with the following replacement paragraph:

Q³ If in step 80 there are one or multiple matches detected by the flow module 44, then the flow module 44 verifies that one of the entries from the layer 3 switching entries matches the received data packet. In particular, the flow module 44 fetches in step 82 the layer 3 information from the layer 3 address entries stored in the policy table 28b having the matched entry signatures. The flow module 44 then performs a bit-by-bit comparison of the selected layer 3 address fields of each accessed layer 3 switching entry and the layer 3 address fields of the received data packet in step 84. Hence, the flow module 44 identifies one of the layer 3 switching entries as a match with the received data packet in step 86 based on the final bit-by-bit comparison of the layer 3 address information. The flow module 44 and forwards the identified entry (e.g., by forwarding the address

Q3 value) to the switching logic 25 enabling the layer 3 switching logic to execute the layer 3 switching decision that corresponds to the identified layer 3 switching entry matching the data packet.

Page 14, first full paragraph (Abstract), replace the existing Abstract with the following new paragraph:

Q4 A network switch, configured for performing layer 2 and layer 3 switching in an Ethernet (IEEE 802.3) network without blocking of incoming data packets, includes network switch ports, each including a flow module configured for generating a packet signature based on layer 3 information within a received data packet. The flow module generates first and second hash keys according to a prescribed hashing function upon obtaining first and second portions of layer 3 information. The flow module combines the first and second hash keys to form the packet signature, and searches an on-chip signature table that indexes addresses of layer 3 switching entries by entry signatures, where the entry signatures are generated using the same prescribed hashing function on the first and second layer 3 portions of the layer 3 switching entries.

IN THE CLAIMS:

Please cancel claim 4 without prejudice or disclaimer to the underlying subject matter.